

REPORT DOCUMENTATION PAGE				Form Approved OMB No. 0704-0188	
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1. REPORT DATE (DD-MM-YYYY) 10/22/2003		2. REPORT TYPE Final Report		3. DATES COVERED (From - To) 04/15/2003 - 09/30/2003	
4. TITLE AND SUBTITLE Geoclutter Target Moorgins			5a. CONTRACT NUMBERS 		
			5b. GRANT NUMBER N00014-03-1-0711		
			5c. PROGRAM ELEMENT NUMBER 		
6. AUTHOR(S) Donald B. Peters			5d. PROJECT NUMBER 		
			5e. TASK NUMBER 		
			5f. WORK UNIT NUMBER 		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Woods Hole Oceanographic Institution Applied Ocean Physics and Engineering Department 86 Water Street, MS #19 Woods Hole, Massachusetts				8. PERFORMING ORGANIZATION REPORT NUMBER 	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) 				10. SPONSORING/MONITORING ACRONYM(S) 	
				11. SPONSORING/MONITORING AGENCY REPORT NUMBER 	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution is unlimited					
13. SUPPLEMENTARY NOTES 					
14. ABSTRACT An air-filled aluminum tube array was designed and constructed to function as an acoustic target for the Geoclutter field experiment. This horizontal array consisted of four 6-inch schedule 10 aluminum pipes 20 feet (6m) long attached to a depressor weight constructed of steel bar. The array was designed to be directionally oriented from the deployment vessel by dragging from the attached deployment/recovery mooring pennant.					
15. SUBJECT TERMS 					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Unlimited	18. NUMBER OF PAGES 5	19a. NAME OF RESPONSIBLE PERSON Donald B Peters
a. REPORT Unclassified	b. ABSTRACT Unclassified	c. THIS PAGE Unclassified			19 b. TELEPHONE NUMBER (Include are code) (508) 289-3377

Final Technical Report

Geoclutter Target Moorings

Grant/Contract No.: N00014-03-1-0711

Period of Award: 15 April 2003 – 30 September 2003

The Geoclutter target was designed to meet the following specification:

- Length 6m
- 4 Air-filled aluminum 6-inch schedule
- 10 pipes in a square bundle
- Sufficient weight to result in approximately 500 lb wet weight
- Ability to orient directionally by dragging
- Attachment point for deployment/recovery mooring penant
- Tagline bales at ends for handling

Attached are an overall dimensioned drawing and two photos of dock testing the target. The target was used successfully in the Geoclutter field experiment for Nick Makris of MIT.

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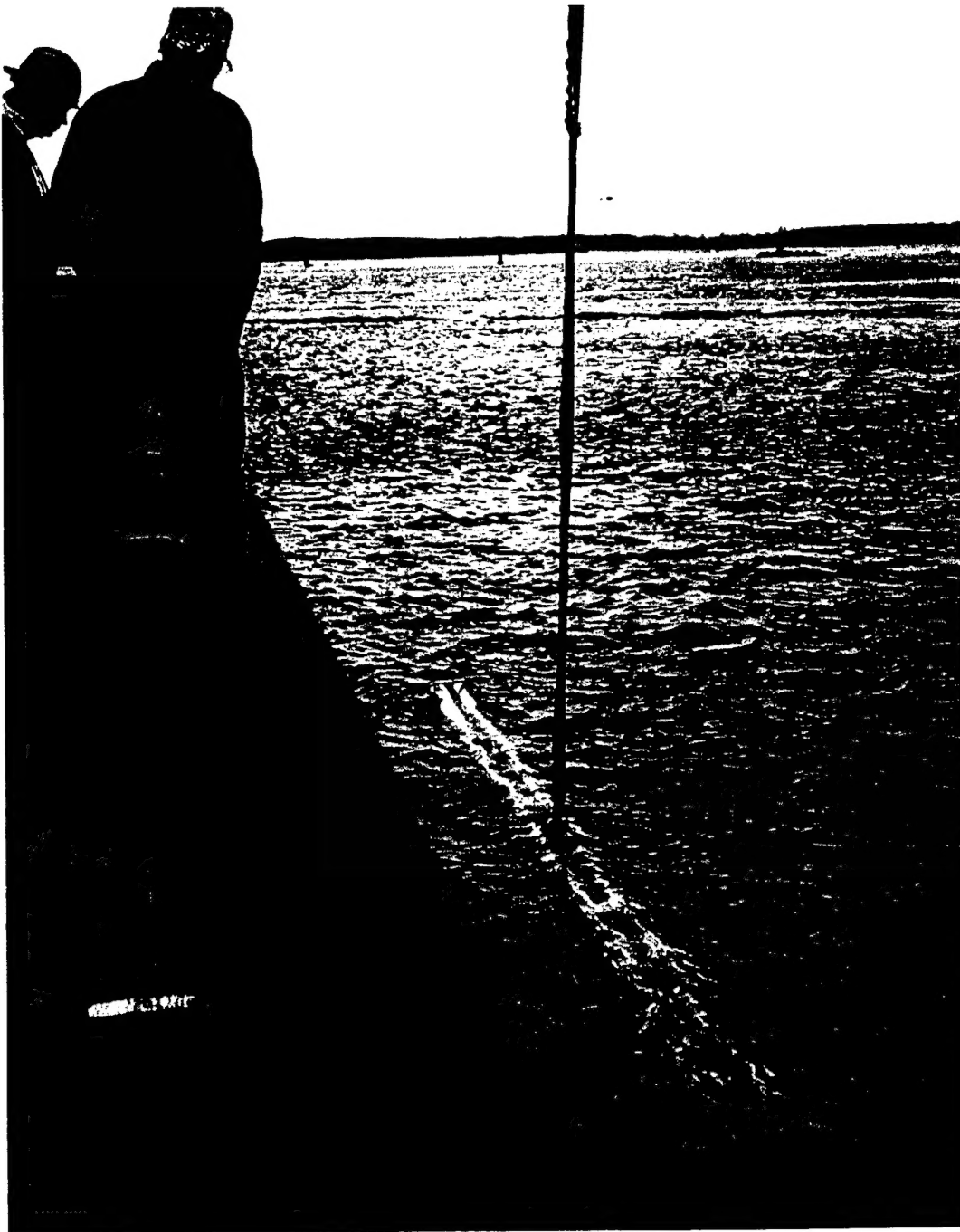
Final Technical Report

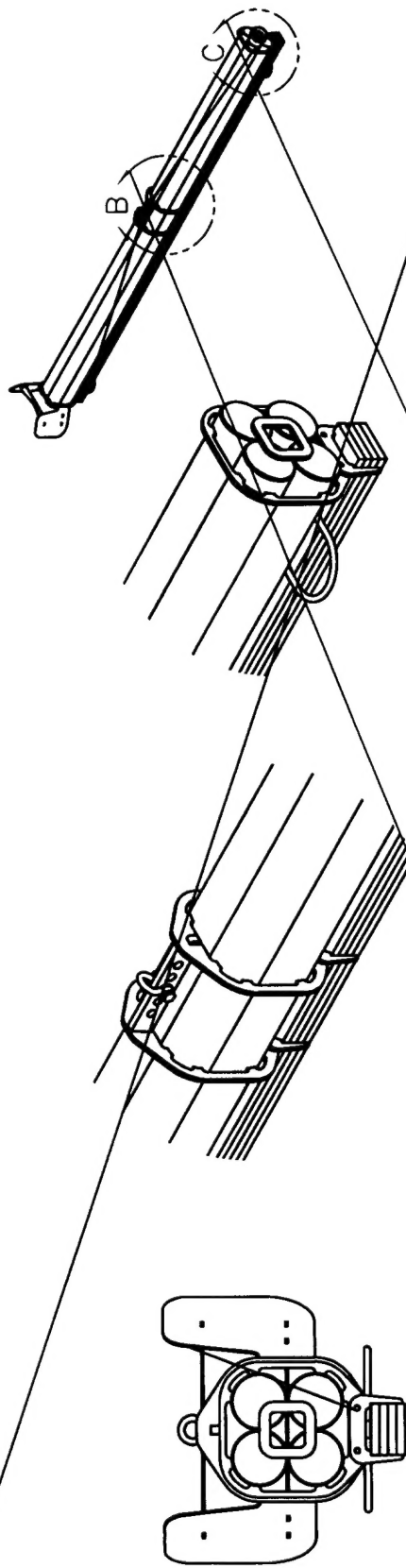
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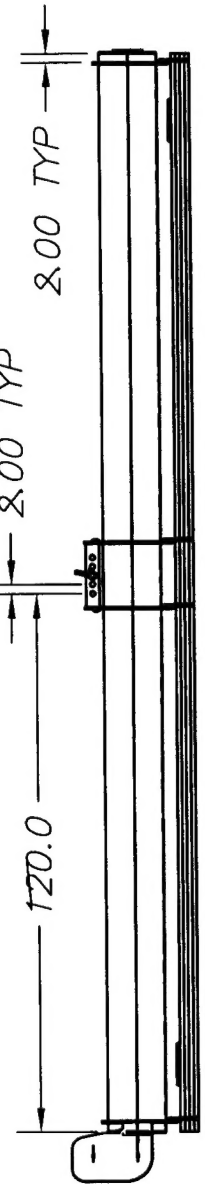
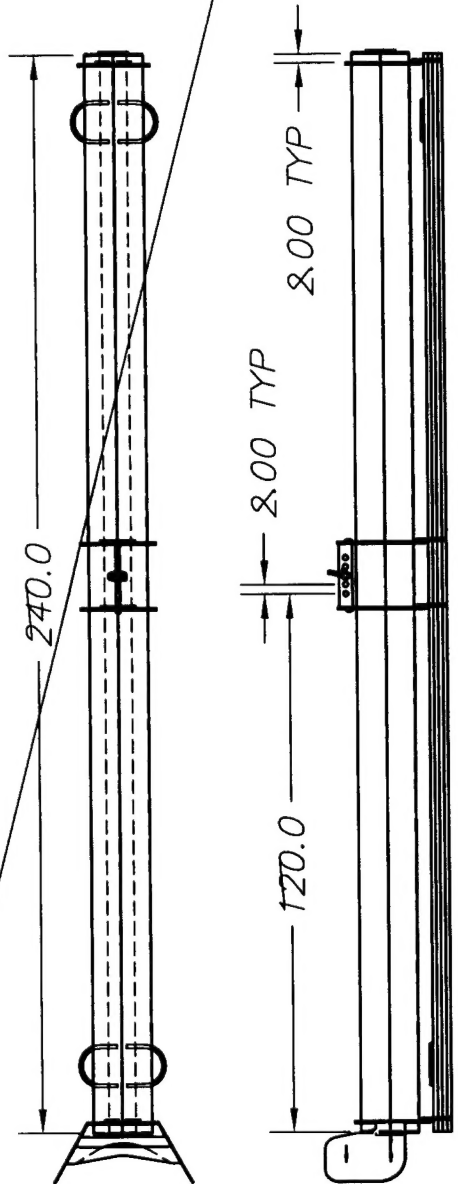




DETAIL A
SCALE 1:20

DETAIL B
SCALE 1:20

DETAIL C
SCALE 1:20



PICK-ANGLE VS. HWT OFFSET

WEIGHT = 1926
BUOYANCY = 1453
WET WEIGHT = 473

HW = 18.62
HB = 10.69

Pick Offset	Pick Angle	Subm Angle
2.00	6	3
4.00	12	5
6.00	18	8
8.00	23	11

DRAWING OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
DECIMALS ARE ANGULAR
DIMENSIONS ARE IN DEGREES
DO NOT SCALE DRAWING

MATERIAL
AS NOTED
FINISH
AS NOTED

PROJECT NO.
PERSON
DATE
CHECK
DRAWN BY

WOODS-HOLE OCEANOGRAPHIC INSTITUTION
APPLIED OCEANOGRAPHICS & ENGINEERING
WOODS-HOLE, MASSACHUSETTS 02543

TITLE
GEOCLUTTER TARGET
ASSEMBLY

SIZE
SCALE
SHEET OF

135-0-0000